

# 4<sup>th</sup> Meeting of the **European and Eurasian Soil Laboratory Network**(EUROSOLAN)

5-6 October 2022



# Interpretation of laboratory results and provision of recommendations to farmers

Prof.Dr. Hasan Sabri Öztürk Soil Scientist and Farmer Ankara University





### Questions - I

- What do soil analysis reports give us?
- Is soil analysis a definitive solution for recommendations to farmers?
- What is the reliability of the analysis results?
- Results or interpretation?



### Questions - II

Are fertilization and nutrient uptake the same thing?

Why is it so complicated to interpret the results of the analysis?

What is the definition of plant available nutrient contents? Who decides that?



## Challenges

- changes over short distances (microclimatic conditions, microtopography, moisture and temperature regime of soil),
- plant variety and type,
- expected yield,
- Critical growth period and age of the plant,
- infrastructure for irrigation and fertilising



#### Common mistakes!

- Ignoring human behaviour and habits
- Ignoring previous crop and harvest yield
- Ignoring antagonistic effects among nutrients
- Paying no attention to the amount of uptake-enhancing compounds or carrier agents in the soil
- Not to following seasonal anomalies (positive or negative) within the production season



#### Conclusion

- Interpretations based solely on lab results fail.
- Consider returning plant nutrients removed from the soil by harvesting
- Take into account any limitations or amount of existing materials in the soil as well as nutrients in the soil when interpreting







Thank you for listening

